



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/509,863	06/10/2005	Guido Plangger	CH02 0005 US	5331
24738 7590 04/12/2007 PHILIPS ELECTRONICS NORTH AMERICA CORPORATION INTELLECTUAL PROPERTY & STANDARDS 1109 MCKAY DRIVE, M/S-41SJ SAN JOSE, CA 95131			EXAMINER NGUYEN, VINH P	
			ART UNIT	PAPER NUMBER
			2829	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		04/12/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/509,863

Applicant(s)

PLANGGER ET AL.

Examiner

VINH P. NGUYEN

Art Unit

2829

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 10-12 is/are rejected.
- 7) ☒ Claim(s) 7-9, 13 and 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 10/01/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Art Unit: 2829

1. The previous restriction requirement mailed on 02/08/07 is hereby withdrawn and all claims 1-14 are examined.
2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
3. The abstract of the disclosure is objected to because legal phraseology such as “comprises” is used. Correction is required. See MPEP § 608.01(b).
4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the feature of “means for detecting the switching state of said switching element” as recited in claim 10 and means for applying a first voltage to said first test point” , “means for applying a second different voltage to said second test point” and “means for detecting a current flow between said first and second test points” as recited in claim 11 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the

renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

5. Claims 1-9 and 13-14 are objected to because of the following informalities:

In claim 1, it is unclear which devices are used to activate the cascade element and to detect the switching state of the switching element.

In claims 7 and 13, it is unclear what "a plurality of electronic elements" and "a plurality of cascade elements" comprise. It appears that there is only one cascade transistor (13) and one electronic element (11) mentioned in the disclosure.

The dependent claims not specifically address share the same indefiniteness as they depend from rejected base claims.

Appropriate correction is required.

6. Claims 8-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 8 and 14, "said group of test transistors" has no antecedent basis.

In claim 10, it is unclear what “means for detecting the switching state of said switching element” comprises of. Is it shown in any of drawings?

In claim 11, it is unclear what “means for applying a first voltage to said first test point” , “means for applying a second different voltage to said second test point” and “means for detecting a current flow between said first and second test points” comprise of. Are they shown in any of drawings?

In claim 13, it is unclear what “a plurality of electronic element” and “ a plurality of cascade elements” comprise of. Are they shown in any of drawings.

The dependent claims not specifically address share the same indefiniteness as they depend from rejected base claims.

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-6 and 10-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Andersen et al (Pat # 6,211,693).

As to claim 1, Andresen et al disclose a testing apparatus as shown in figures 1-2. According to Andresen et al, a cascade circuit includes an electronic component (Q1,Q4) to be protected by high voltage and a cascade element (Q2,Q3) having the steps of

arranging a test node (A,C) between said electronic element (Q1) and said cascode element (Q2, allocating a switching element (Q6,Q7) to said test node (A,C) and connecting said switching element to said test node, said switching element having a plurality of switching states and being constituted such that its switching state is changed when the voltage at said test node exceeds or falls below a given voltage limit, - activating said cascode element (Q2,Q3) by a biasing network (21) and detecting the switching state of said switching element by a test circuit (10).

As to claims 2 and 6, the voltage limit at the test node (A,C) is chosen to be an upper voltage limit V_{cchv} (5V) applicable to the electronic element (Q1,Q4) if the electronic element (Q1,Q4) is connected to a ground-voltage line (ground line at the end of the electronic element (Q4)) when the cascode (Q2,Q3) are defected, then there is a current flowing in the test circuit (10).

As to claim 3, wherein the switching element (Q6,Q7) is a test transistor , the gate of the test transistor (Q6,Q7) is connected to the test node (A,C), the source of the test transistor (Q6,Q7) is connected to a first test point (D) and a drain of the test transistor (Q6,Q7) is connected to a second different voltage) and a current flow between the first test point (D) and the second test points (E) is detected by the test circuit (10).

As to claim 4, the detection of a current flow used for testing a correct or an incorrect working of the cascade circuit (Q2,Q3) or for determining a voltage on the test node (A,C) (see column 4, lines 9-48).

As to claim 6, the electronic element (Q4) and the test transistor (Q6) of Andresen et al are N-MOS field effective transistors of a first channel conduction type

As to claim 10, Andresen et al disclose a testing apparatus as shown in figures 1-2 having an electronic element (Q1,Q4) to be protected from high voltage, a cascade element (Q2 ,Q3) connected to the electronic element (Q1,Q4), a test node (A ,C),a test circuit (10) including a plurality of switching elements (Q6,Q7) with a plurality of switching state and being constitute such that its switching state is changed when the voltage at the test node (A,C) exceeds or fails below a given voltage (see column 4, lines 9-48). It appears that the test circuit (10) of Andresen et al inherently includes means for detecting the switching sate of the switching elements in order to determine whether there is a current or no current flowing through the switching elements (Q6, Q7) (see column 4, lines 9-48).

As to claim 11, the switching element (Q6,Q7) is a test transistor , the gate of the test transistor (Q6,Q7) is connected to the test node (A,C), the source of the test transistor (Q6,Q7) is connected to a first test point (D) and a drain of the test transistor (Q6,Q7) is connected to a second different voltage). It appears that the device of Andresen et al inherently includes means for applying the first and second voltage to the first and second test points in order to provide voltage signals at those test points . Furthermore, the device of Andresen et al also inherently includes means for detecting a current flow between the first test point (D) and the second test points (E) in the test circuit (10) in order to determine the defected cascode element (Q2,Q3).

As to claim 12, the electronic element (Q4) and the test transistor (Q6) of Andresen et al are N-MOS field effective transistors of a first channel conduction type.

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Blake et al (Pat # 5,995,010) disclose output buffer providing testability.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VINH P. NGUYEN whose telephone number is 571-272-1964. The examiner can normally be reached on 6:30AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, HA T. NGUYEN can be reached on 571-272-1678. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

Art Unit: 2829

like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



VINH P NGUYEN

Primary Examiner

Art Unit 2829

03/30/07